

OTC medications.

Method/study design: The structured counseling approach (SAIDS) consisted of five elements: (1) Surfacing symptoms and medication history, (2) Inquiring about allergies, (3) Providing medication indication, (4) Directing correct medication use, and (5) Supporting self-care. During six-week Advanced Community Pharmacy Practice Experiences (ACPPEs), students offered conventional OTC counseling in the first three weeks, followed by the SAIDS approach in the last three weeks. Consumer participants were recruited from six community pharmacies in Taiwan between 2020 and 2022. Self-administered questionnaires were used to assess consumers' understanding of OTC use and to evaluate students' self-efficacy and skills in OTC counseling.

Findings: A total of 31 pharmacy students participated in the ACPPEs, documenting 292 OTC counseling sessions. Of these, 128 customers received conventional counseling, while 159 received SAIDS counseling. Consumers who received SAIDS medication counseling demonstrated a significantly better understanding of the cautions associated with the OTC products they purchased ($p < 0.001$). Pharmacy students reported a significant increase in self-efficacy ($p < 0.001$) in OTC counseling over the 6-week ACPPE period. They noted that the ACPPE offered valuable opportunities to practice medication counseling independently. In qualitative feedback, students highlighted that the SAIDS method helped them asked insightful questions to assess consumers' needs, recommended appropriate OTC products, and provided crucial counseling information. They also noted that SAIDS fostered empathy for consumers' discomfort, promoted shared decision-making, ensured completeness of the counseling process, and empowered consumers to manage their own medication. Additionally, students observed that consumers often had difficulty reconciling conflicting information from various sources or lacked a clear understanding of their conditions. The SAIDS approach enabled students to have meaningful conversations that helped clarify essential aspects of OTC product use.

Conclusion: Pharmacy students reported increased self-efficacy in OTC counseling and a better understanding of OTC use among consumers when using the structured SAIDS approach. This structured counseling method proves effectiveness in enhancing students' communication skills, enabling them to support the public in using OTCs safely and effectively.

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Empowering Community Pharmacists for Next-Generation Therapeutics: Assessing Knowledge Needs and Implementing Educational Solutions

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Background: Next-generation therapeutics (NGTs) transform healthcare with innovations like precision medicine, biologics, gene therapies, nanomedicines, eHealth solutions and artificial intelligence. In this new healthcare ecosystem, community pharmacists (CPs) can play a pivotal role. However, CPs face challenges such as knowledge gaps, limited training, and insufficient collaboration with other healthcare professionals. These obstacles highlight the need for continuous education to assist CPs integrate NGTs into everyday practice.

Purpose: To assess CPs' expertise with NGTs and explore the challenges and the educational needs they face in incorporating these innovations into their practice. Based on the findings, an educational program was designed and is currently implemented.

Method/Study Design: A pilot study was conducted through a questionnaire among CPs. Data were gathered on their knowledge, familiarity awareness and

their views on the pharmacist's role as to NGTs. Demographic data and years of working experience were collected for context.

Findings: The questionnaire was completed from 35 CPs. The majority were aged 30–45, (71.4%) holding graduate-level degrees (68.6%) with 10–20 years of working experience. CPs 51.4% reported little familiarity with NGT, with 40% rarely aware of patients undergoing such treatments. Key challenges included limited time for training (77.1%) and access to educational material (51.4%), leaving 45.7% of them feeling unprepared for patient care as to NGTs. CPs reported infrequent collaboration with healthcare professionals (51.4%) and rarely empowering patients on novel therapies (57.1%). Identified obstacles were workload (71.4%) and lack of training (68.6%). CPs (65.7%) saw their role in managing novel treatments as essential, with most wanting training on eHealth and AI tools (65.7%) and biotechnological products (62.9%). Key resources were educational programs (91.4%), clinical guidelines, and expert collaboration (62.9% each).

To address these challenges, the Community Pharmacist Association of Heraklion, in collaboration with the School of Medicine and the Center for Training and Lifelong Learning of the University of Crete, established a 100-hour online training course entitled "Advanced Training in Pharmaceutical Sciences and Community Pharmacy." The first course was completed by 30 CPs. All participants reported updating their knowledge, finding the program effectively covered NGTs (60.0%), especially for biotechnological medicines (83.3%). They plan to use their knowledge for patient empowerment and for personalized care (80%). All would recommend the program for CPs.

Conclusion: The pharmacy landscape is evolving, and it is crucial to enhance CPs' literacy in managing NGT. Thus, it is important to identify the CPs' needs in order to apply efficient educational strategies.

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A potential impact of mindfulness intervention on emotional intelligence in postgraduate pharmacists

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Background: Emotional intelligence (EI) is an essential skill set for pharmacists, as it represents a type of social intelligence which encompasses the abilities to recognise, perceive and manage one's own emotions and those of others to guide the thought process better, handle challenges, increase motivation and improve overall well-being. Mindfulness interventions have been used and proven to increase EI levels, particularly emotional self-awareness and emotion regulation. Growing evidence shows that mindfulness practice may positively influence EI levels in different healthcare professionals. However, this phenomenon has not been studied in practising pharmacists.

Purpose: To test the potential impact of mindfulness intervention on EI levels in postgraduate pharmacists and to correlate EI and perceived stress levels before and after the intervention.

Method: The interventional study with a pretest-posttest design was employed. Pharmacy postgraduates specialising at the Faculty of Pharmacy, University of Belgrade, were purposefully sampled to take part in the study conducted between November 2021 and June 2022. The intervention included two 90-minute sessions focusing on mindfulness meditation ("focussed attention and open monitoring"), journaling, intention-setting, and gratitude practices. Validated instruments, such as the Genos Emotional Intelligence Inventory Concise Version and the Perceived Stress Scale, were distributed electronically to all participating pharmacists before and after the intervention. Appropriate descriptive and correlation statistics tests were used to analyse the data.

Findings: Of 44 invited postgraduate pharmacists, 35 participated, and data from 28 pharmacists satisfying the inclusion criteria were analysed. The mean EI levels before the intervention were 115.32 ± 11.98 and did not increase significantly after the intervention ($t = -1.323$, $p = 0.197$, $d = -0.250$). However, there was a significant increase in the Emotional Self-Control EI subdomain levels ($Z = -3.005$, $p = 0.003$, $r = -0.402$). The subanalysis revealed that the highest impact of the intervention on the mean EI levels change was in the clinical pharmacists and other pharmacists' subgroups (5.1 ± 6.6 and 5.5 ± 6.2 , respectively). Increased

negative correlation between the Self-Awareness levels and total score of the perceived stress levels after the intervention indicates the potential stress-protective effects of this EI subdomain ($\rho=-0.439$, $p<0.05$).

Conclusion: Our results suggest that even short-term mindfulness interventions may positively impact some EI competencies, particularly the Emotional Self-Control subdomain. They also indicate that the intervention may increase emotional self-awareness' protective effects against perceived stress. Implementing mindfulness-based interventions should be considered throughout the continuum of pharmacists' professional development, particularly in pharmaceutical care. Additional research with longer-term interventions is needed to confirm our findings.

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Strengthening continuity of health care: Requesting medication updates from community pharmacy to primary care physicians. A case report.

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Electronic prescribing enables prescribers to remotely submit prescriptions to community pharmacies. It has been promoted as a solution to improve patient safety and the quality and continuum of healthcare. Requesting the update of a given e-prescription, formalize the process by which a GP authorizes its renewal. This process ensures that the treatment is available for dispensing for a maximum of 12 months. Although e-prescription activation request from community pharmacies reduces the need for ongoing prescription renewals, the time that a GP allocates to associated administrative tasks may vary depending on the healthcare system, the IT systems, and the administrative load at the health centre. Previous research indicate that GPs spend a significant amount of time on administrative tasks, including medication management on patients' health records.

Objective: To evaluate the update request of e-prescriptions from a community pharmacy.

Method: This case report adopted a quasi-experimental design and was conducted over six-months (February–August 2024) in a community pharmacy and a health centre in Badajoz, Spain. The study sample consisted of 550 patients attending the same community pharmacist, GP, and nurse. The community pharmacy carried out a two-level intervention, involving patient and physician interactions. The pharmacist-patient interaction was conducted during the dispensing process whenever it was identified that they required a medication, but an e-prescription was not available. In this scenario, the pharmacist offered the patient assistance in updating their e-prescription by contacting the GP directly. The pharmacist-GP interaction involved a pharmacist-initiated communication to request the update of the patient's e-prescription.

The agreed communication channel between the community pharmacist and the GP was text messaging.

Results: The community pharmacy conducted 931 interventions. The GP made 1,324 prescription modifications for patients, of which: 1,135 (85,72 %) were prescription updates for prescription renewals for patients with chronic diseases, 92 (6,95 %) to initiate new prescriptions, 58 (4,38 %) updates of prescription dates, 25 (1,89%) changes in the medicine dose or dosing regimen, and 14 (1,05 %) modifications in the quantity or administration form. Interventions were accepted by both patients and the GP and resolved in 100% of cases.

Conclusions: This study demonstrates that requesting e-prescription updates and modifications from the community pharmacy to the GP is an efficient process when a rapid and an effective communication channel is used. This collaboration with GPs benefits the patient by facilitating access to needed medications without extra administration processes.

Key words: physician, primary care, pharmacist, e-prescriptions, community pharmacy.

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Patterns of Use and User Attitudes Toward Herbal-based Food Supplements and OTC Medicines in Bulgaria

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Background: The rising use of food supplements and over-the-counter (OTC) medicines containing herbal substances has sparked ongoing discussions about their safety, effectiveness, and potential interactions with conventional medications. Despite their widespread popularity, there is limited data on consumer awareness and behaviors regarding these products, especially in terms of their risks and benefits.

Aim: This study sought to examine the prevalence, usage patterns, and motivations for using food supplements and OTC medicines with herbal ingredients in Bulgaria. It also aimed to assess the level of consumer knowledge regarding the safety, efficacy, and potential interactions of these products with other medications.

Methods: An electronic survey was administered between May and September 2024, collecting responses from 1,055 Bulgarian adults. The survey explored participants' usage habits, preferred herbal ingredients, perceived benefits, and their awareness of associated risks. Data on spending habits, sources of purchase, and healthcare consultations were also gathered.

Findings: A significant 76% of respondents reported using herbal-based food supplements or OTC medicines, with 30% citing the natural origin and perceived safety of these products as their primary motivation. Over half of the users indicated that they use supplements to manage acute health issues, while many with chronic conditions integrated these products into their therapeutic routines. Notably, 24% of respondents admitted to substituting prescribed medications with herbal supplements. Spending on these products was primarily in the range of 100 to 200 euros annually. Interestingly, 58% of users consulted healthcare professionals, such as physicians or pharmacists, prior to purchasing supplements, and the majority preferred to buy them from pharmacies.

Conclusion: The findings highlight the widespread use of herbal-based products and the need for greater consumer education on their safety, efficacy, and potential interactions with prescribed medications. Healthcare providers and public health initiatives must enhance efforts to inform consumers about the appropriate use of these products to ensure both their benefits and safety. Future research should focus on the long-term effects of herbal supplements, their interactions with prescription drugs, and the role of regulatory measures in ensuring the safety and efficacy of these products.

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Keywords: food supplements, OTC medicines, herbal products, consumer behavior, safety, efficacy, drug interactions, Bulgaria

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Balancing Efficiency and Accuracy in Medication Review Type 3 Quality Assessment: A Novel Approach

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